

Date: Sun, 17 Apr 94 04:30:08 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #108
To: Ham-Ant

Ham-Ant Digest

Sun, 17 Apr 94

Volume 94 : Issue 108

Today's Topics:

70cm Parabolic Dish

Discone Antenna

Ladder Line

What to do for RF Ground?

What to do for RF Ground? (2nd try)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>

Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 15 Apr 1994 22:44:52 GMT

From: usc!howland.reston.ans.net!news.intercon.com!panix!zip.eecs.umich.edu!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!quartz.ucs.ualberta.ca!
kakwa.ucs.ualberta.ca!gov.nt@ihnp4.ucsd.edu

Subject: 70cm Parabolic Dish

To: ham-ant@ucsd.edu

Is it worthwhile to try to use a 2.5m parabolic dish for 70cm?
I have a surplus TVRO dish and would use a 3 turn helix as a feed.
If so, what would be the smallest practical size for the reflector
on the helix to maximize the gain while blocking the least amount
of signal from the dish. Also, what sort of gain could I expect?
It would be used for 70cm EME and also for satellite work.

73

John Boudreau

ve8ev@inukshuk.gov.nt.ca

Date: Sat, 16 Apr 1994 18:13:25 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!howland.reston.ans.net!vixen.cso.uiuc.edu!
uwm.edu!msuinfo!netnews.upenn.edu!iat.holonet.net!vectorbd!jpll@network.ucsd.edu
Subject: Discone Antenna
To: ham-ant@ucsd.edu

Chris Little (cjl@galaxy.nsc.com) wrote:

: like to try building my own, but will I really get the bandwidth I
: need?

You surely get the BW, just no gain!

The Radio Shack one is \$60

-Jim wa2zkd

--
-
-Jim Lill- Vector Board BBS
jpll@vectorbd.com 716-544-1863/2645
wa2zkd@wb2psi.#wny.ny.usa.na GEnie: ZKD

Date: Sat, 16 Apr 1994 18:11:36 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!news.moneng.mei.com!uwm.edu!msuinfo!netnews.upenn.edu!
iat.holonet.net!vectorbd!jpll@network.ucsd.edu
Subject: Ladder Line
To: ham-ant@ucsd.edu

Christopher D. Sorensen (cdsorens@mtu.edu) wrote:
: Where does one aquire 450ohm transmission quality ladderline?

Saxon Wire used to make it at one time....

-Jim wa2zkd

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-
-Jim Lill- Vector Board BBS
jpll@vectorbd.com 716-544-1863/2645
wa2zkd@wb2psi.#wny.ny.usa.na GEnie: ZKD

Date: 16 Apr 94 00:25:10 MDT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!hellgate.utah.edu!cc.usu.edu!
sltmw@network.ucsd.edu
Subject: What to do for RF Ground?
To: ham-ant@ucsd.edu

In article <2oic53\$t24@pace2.cts>, cdsorens@mtu.edu (Christopher D. Sorensen) writes:

> I have my station on the second floor of my house and unfortunately there is
> no water pipes or anything of the sort for a decent RF ground.
>
> I have been told continuously that the run to the earth ground must be short
> for it to be effective. Would it be ok to have a pipe driven in the ground
> outside just as though I had a groundfloor station and just run the ground wire
> down outside to the ground rod? Or would this just be a waste of time?
>
> I don't get any bites, but I would sure like to have a good rf ground system.
> especially when I eventually run more power.
>
> Any info appreciated.
>
> Chris -- N8PBI
>

Well, like you have seen already, you may not need an RF ground. But, if you *do* happen to need one, here is my 2 cents (flame suit on)

I have an HF antenna out my 6th floor dorm window (details on that later), and it didn't seem to work on anything but QRP power limits. This antenna is really a makeshift, so I had to be able to run a little power. Well, my father happened to buy the MFJ artificial ground in the hopes that would cure a few of my problems. All this is, is a counterpoise-tuner. It has a simple L-C circuit, with a fancy RF current meter in it. But, it seems to be able to work. I threw 50 feet of wire out my window, into a nearby tree, tuned it, and it seemed to work quite well. I used high-gauge wire, just because of aesthetics (I doubt USU housing would look kindly on my HF station).

So, FWIW, the artificial ground seemed to help my station. It got the RF out of my room (my answering machine no longer turns on!)...

(Sorry for any grammer, and typos, etc.--the lights are off, it is 12:30 A.M., and my roommate is asleep)

73 de Dan, N7NKR

--

Daniel D Holmes " " - Marcel Marceau
Internet: SLTMW@CC.USU.EDU
AmprNet: N7NKR @ N7NKR.HOME.AMPR.ORG 44.40.1.43 [located in Salt Lake City]
N7NKR @ N7NKR.AMPR.ORG 44.40.12.10 [located in Logan]

Date: 17 Apr 1994 06:18:17 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!pravda.sdsc.edu!acsc.com!wp-
sp.nba.trw.com!newswire.etdesg.TRW.COM!wayne@network.ucsd.edu
Subject: What to do for RF Ground?(2nd try)
To: ham-ant@ucsd.edu

My last posting somehow was truncated, and only partially posted.
Here goes again--sorry about that.

Chris writes:

>I have been told continuously that the run to the earth ground
>must be short for it to be effective. Would it be ok to have a
>pipe driven in the ground outside just as though I had a
>groundfloor station and just run the ground wire down outside to
>the ground rod? Or would this just be a waste of time?

Wayne writes:

>For purposes of *thought experimentation*, consider a metal box
>containing a battery powered transmitter, driving a dummy
>load. Would you suppose that that system would work any better
>if connected to a cold water copper pipe? Probably not.

>
>How about the same system with coaxial feed to an external dummy
>load? The copper pipe ground still seems to add nothing.
>
>How about replacing the dummy load with a matched antenna? The
>copper pipe seems unnecessary.

(stuff deleted)

Gary writes:

:Only if the antenna is balanced, IE like a dipole. If the antenna is
(good stuff deleted)

Wayne responds:

Hmmmm--

So the battery operated transmitter feeding a matched antenna
needs a cold water copper pipe ground if the antenna is unbalanced?

No, there is not a requirement that the transmitter be connected
to a cold water copper pipe ground if the antenna is unbalanced.

1. An unbalanced dummy load does not require the connection.
2. My imaginary battery operated transmitter has coax feed. As far as it is concerned, all matched loads are unbalanced, even if the antenna is balanced.
3. I didn't tell anyone, but my imaginary matched antenna is unbalanced. It is a ground plane in free space and is not connected to any copper pipes or earth ground. It works very well, at least in my imagination.

--wayne W5GIE operating in exile from Redlands, Ca.

"speaking for myself"

Date: 16 Apr 1994 00:25:47 GMT
From: ihnp4.ucsd.edu!news.cerf.net!pravda.sdsc.edu!acsc.com!wp-sp.nba.trw.com!
newswire.etedsg.TRW.COM!wayne@network.ucsd.edu
To: ham-ant@ucsd.edu

References <2oic53\$t24@pace2.cts>, <2oikuk\$osk@newswire.etedsg.TRW.COM>, <1994Apr14.124742.11856@ke4zv.atl.ga.us>de
Subject : Re: What to do for RF Ground?

End of Ham-Ant Digest V94 #108
